

Sequence Alignments

RESULT 3
 AAA95442
 ID AAA95442 standard; cDNA; 3280 BP.
 XX
 AC AAA95442;
 XX
 DT 12-FEB-2001 (first entry)
 XX
 DE Human CASB619 protein coding sequence #1.
 XX
 KW Human; CASB619; cancer; autoimmune disease; immunogen; vaccine;
 KW epitope; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key
 FT CDS
 FT Location/Qualifiers
 FT 1..3342
 FT /*tag= a
 FT /product= "CASB619"

Wed Mar 12 10:08:32 2003

XX WO200058460-A2.
 XX PD 05-OCT-2000.
 XX PF 20-MAR-2000; 2000WO-EP02478.
 XX PR 26-MAR-1999; 99GB-0007113.
 XX PR 25-SEP-1999; 99GB-0022858.
 XX PA (SMIK) SMITHKLINE BEECHAM BIOLOGICALS.
 XX PI Bruck CEM, Cassart J, Coche T, Vinals De Bassols YC;
 XX DR WPI: 2000-664923/64.
 XX DR P-PSDB; AAB26179.
 XX PT Novel CASB619 polypeptides useful for diagnosing, and as vaccines for
 XX PT prophylactic and therapeutic treatment of, cancers, particularly
 XX PT ovarian and colon carcinoma, and autoimmune diseases
 XX PS Claim 13; Page 53-54; 68pp; English.
 XX CC The present sequence comprises the human CASB619 coding sequence. This
 XX CC protein is thought to be specifically or over-expressed in tumour cells,
 XX CC and so can be used as a target for antigen-specific immune responses
 XX CC which can cause destruction of the tumour cell. In addition, the protein
 XX CC and gene can be used in cancer diagnosis, in the treatment of autoimmune
 XX CC diseases and in vaccines against cancer and autoimmune disease. The
 XX CC invention provides a number of epitopes derived from the protein which
 XX CC can be used as immunogens.
 XX SQ Sequence 3280 BP; 810 A; 930 C; 797 G; 743 T; 0 other;
 Query Match 97.8%; Score 3259.6; DB 21; Length 3280;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 3273; Conservative 0; Mismatches 4; Indels 1; Gaps 1;
 QY 58 ATGGCTGAGCTGGGACAGCCACCATCTCTCCGCCAGAGTCAAGGGAAGAACTGAGAGG 117
 DB 1 ATGGCTGAGCTGGGACAGCCACCATCTCTCCGCCAGAGTCAAGGGAAGAACTGAGAGG 60
 QY 118 CGCATACCCCGGCTGTGGGGCTGTGCTCTGGGCTGGGACCGCTTCCAGGTGACCCAG 177
 DB 61 CGCATACCCCGGCTGTGGGGCTGTGCTCTGGGCTGGGACCGCTTCCAGGTGACCCAG 120
 QY 178 GGAACGGGACCGGAGCTTCAAGGCTCAAGAGCTCTGAGTACCACATGATGATGATGATG 237
 DB 121 GGAACGGGACCGGAGCTTCAAGGCTCAAGAGCTCTGAGTACCACATGATGATGATGATG 180
 QY 238 TGTGACAGCAGCGGTTCACGCTGAGGCTGAGGCTGCGGCTGCGGATACCCCGGCTGTG 297
 DB 181 TGTGACAGCAGCGGTTCACGCTGAGGCTGAGGCTGCGGCTGCGGATACCCCGGCTGTG 240
 QY 298 AGCTGCTGACCCCGCTCAAGGACCGAGTGTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 357
 DB 241 AGCTGCTGACCCCGCTCAAGGACCGAGTGTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 300
 QY 358 CTGATATGAGGACCGAGTCAAGCCTGAGGCTGAGGCTGAGGCTGAGGCTGAGGCTGAG 417
 DB 301 CTGATATGAGGACCGAGTCAAGCCTGAGGCTGAGGCTGAGGCTGAGGCTGAGGCTGAG 360
 QY 418 GGCATTCGGTGTGATGAGTGGATGAGTGGCTGCGGCTGCGGCTGCGGCTGCGGCTGCG 477
 DB 361 GGCATTCGGTGTGATGAGTGGATGAGTGGCTGCGGCTGCGGCTGCGGCTGCGGCTGCG 420
 QY 478 ATGGAGCTGGATGACAGTGTCTGAGTCCACCGGGAAGTGTACTTCTGTCGAAGTGGGT 537
 DB 421 ATGGAGCTGGATGACAGTGTCTGAGTCCACCGGGAAGTGTACTTCTGTCGAAGTGGGT 480
 QY 538 CCCCGGGGCGACTACATCGCTTCAACCGGACGAGTGCACAGCCACACACTGATGTACGCC 597
 DB 481 CCCCGGGGCGACTACATCGCTTCAACCGGACGAGTGCACAGCCACACACTGATGTACGCC 540

QY 598 GTCAACCTGAAGCAATCTGGCACCGTTAACTTCGAATACTACTATCCAGACTCCAGCATC 657
 DB 541 GTCAACCTGAAGCAATCTGGCACCGTTAACTTCGAATACTACTATCCAGACTCCAGCATC 600
 QY 658 ATCTTTGAGTTTTTTCGTTTCAGATGACCAAGTGCAGCCCAATGCAGATGACTCCAGGTG 717
 DB 601 ATCTTTGAGTTTTTTCGTTTCAGATGACCAAGTGCAGCCCAATGCAGATGACTCCAGGTG 660
 QY 718 ATGAAGACCAAGAGGATGGGAATTCACAGTGTGGAGTAAATCGAGGCAATAT 777
 DB 661 ATGAAGACCAAGAGGATGGGAATTCACAGTGTGGAGTAAATCGAGGCAATAT 720
 QY 778 GTCTCTATTGGAAACCAAGCCTTCTCAGTATGACCAAGTGCAGCCCAATGCAGTGTCTG 837
 DB 721 GTCTCTATTGGAAACCAAGCCTTCTCAGTATGACCAAGTGCAGCCCAATGCAGTGTCTG 780
 QY 838 GTGAGAAACATTTGCCATAACAGGGGTGCTTACACTTCAGAAATCTTCCCTCGCAACCT 897
 DB 781 GTGAGAAACATTTGCCATAACAGGGGTGCTTACACTTCAGAAATCTTCCCTCGCAACCT 840
 QY 898 GGCACGTATGCAGAAACAGGCGTCTCTTCTGCAAACTTTGCCAGCCCACTCTTAT 957
 DB 841 GGCACGTATGCAGAAACAGGCGTCTCTTCTGCAAACTTTGCCAGCCCACTCTTAT 900
 QY 958 TCAATAAAGAGAAACTTCTTGCACCAAGTGTGACCTGACAAATCTCAGAGAAAGGA 1017
 DB 901 TCAATAAAGAGAAACTTCTTGCACCAAGTGTGACCTGACAAATCTCAGAGAAAGGA 960
 QY 1018 TCTTCTTCTGTAAGTGTGCGGCTGACAGTGTGACAGAAAGATTTTCTACACACAGC 1077
 DB 961 TCTTCTTCTGTAAGTGTGCGGCTGACAGTGTGACAGAAAGATTTTCTACACACAGC 1020
 QY 1078 GCTCTCGATGCCAACGGAGAGACAACTCATGTAAATGGGCAAGCCGAAATCTGT 1137
 DB 1021 GCTCTCGATGCCAACGGAGAGACAACTCATGTAAATGGGCAAGCCGAAATCTGT 1080
 QY 1138 AGCAGGACCTTTAGGGGCGAGTGAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1197
 DB 1081 AGCAGGACCTTTAGGGGCGAGTGAAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1140
 QY 1198 CCTGCAACCCAGGCTTCTTCAAAACCAACAGCACCTGCCAGCCCTGCCCATATGT 1257
 DB 1141 CCTGCAACCCAGGCTTCTTCAAAACCAACAGCACCTGCCAGCCCTGCCCATATGT 1200
 QY 1258 TCTCTCTCAATGGCTCAGACTGTACCCGCTGCCCTGCGAGGAGTGAACCTGCTG 1317
 DB 1201 TCTCTCTCAATGGCTCAGACTGTACCCGCTGCCCTGCGAGGAGTGAACCTGCTG 1260
 QY 1318 TTTGAAATACAAATGGTGGAAACAGCTGCCCAACAAATGGAACGAGCCGTTCTCAGTGG 1377
 DB 1261 TTTGAAATACAAATGGTGGAAACAGCTGCCCAACAAATGGAACGAGCCGTTCTCAGTGG 1320
 QY 1378 ATCAACTTCAGTACAGGCGCATGACAGGCTGGGAGTGGCTGGTGTATCATATTACACA 1437
 DB 1321 ATCAACTTCAGTACAGGCGCATGACAGGCTGGGAGTGGCTGGTGTATCATATTACACA 1380
 QY 1438 GCTCTGAGGCTCAGACAAATGACTTCTACTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1497
 DB 1381 GCTCTGAGGCTCAGACAAATGACTTCTACTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1440
 QY 1498 CCTCCGAGCTGGTGTGGCAGACAGAGAAATGAAGGTTGGCCAGAAATCATATTGTC 1557
 DB 1441 CCTCCGAGCTGGTGTGGCAGACAGAGAAATGAAGGTTGGCCAGAAATCATATTGTC 1500
 QY 1558 TTTGAGACCTCTGTTGTTGAACTGTGAGCTTCTACTTCTGCTGGGTGTGAATCTAGG 1617
 DB 1501 TTTGAGACCTCTGTTGTTGAACTGTGAGCTTCTACTTCTGCTGGGTGTGAATCTAGG 1560
 QY 1618 ACCACACTCTGTTGGAGCAGTGGAAAGGTTCCAAAGGCAACAGTCTCTATACCTACATC 1677
 DB 1561 ACCACACTCTGTTGGAGCAGTGGAAAGGTTCCAAAGGCAACAGTCTCTATACCTACATC 1620

QY 1678 ATTGAGGAGAACACTACACAGAGCTTACCTGGGCTTCCAGAGGACCACTTTTCATGAG 1737
D 1621 ATTGAGGAGAACACTACACAGAGCTTACCTGGGCTTCCAGAGGACCACTTTTCATGAG 1680
QY 1738 GCAAGCAGGAAGTACACCAAGTTCGCAAGATCTACTCCATCAATGTCCAAATGTT 1797
D 1681 GCAAGCAGGAAGTACACCAAGTTCGCAAGATCTACTCCATCAATGTCCAAATGTT 1740
QY 1798 ATGAATGGCGTGGCTCTCTACTTGGCGTCCCTGTGCGCTTAGAAGCTCTGTGATGTGGGCTCC 1857
D 1741 ATGAATGGCGTGGCTCTCTACTTGGCGTCCCTGTGCGCTTAGAAGCTCTGTGATGTGGGCTCC 1800
QY 1858 TCCTGCACCTCTGTGCTGCTGCTTACTATATTGACCGAGATTCAGGAACCTGCCACATCC 1917
D 1801 TCCTGCACCTCTGTGCTGCTGCTTACTATATTGACCGAGATTCAGGAACCTGCCACATCC 1860
QY 1918 TGCCTCCCTTAACAAATCTGAAAGCCCAACAGCTTATGCTGCTCAAGCTGTGTGCC 1977
D 1861 TGCCTCCCTTAACAAATCTGAAAGCCCAACAGCTTATGCTGCTCAAGCTGTGTGCC 1920
QY 1978 TGTGCTCAGGACCAAGAACAGATCCACTCTCTGTGCTACAATGATGCACTTC 2037
D 1921 TGTGCTCAGGACCAAGAACAGATCCACTCTCTGTGCTACAATGATGCACTTC 1980
QY 2038 TCACGCAACACTCCCAACAGGACTTCAACTACAACCTTCCGCTTTGGCAACACCGTC 2097
D 1981 TCACGCAACACTCCCAACAGGACTTCAACTACAACCTTCCGCTTTGGCAACACCGTC 2040
QY 2098 ACTTGTGCTGAGGCGCAAGCTTCACTTCCAAAGGTTGAAATCTCCATCACTTTAGC 2157
D 2041 ACTTGTGCTGAGGCGCAAGCTTCACTTCCAAAGGTTGAAATCTCCATCACTTTAGC 2100
QY 2158 CTCAGTCTCTGTGGAACACAGGCTAGGAAATGTCTGTGCTACCGCAATGTCACTGAC 2217
D 2101 CTCAGTCTCTGTGGAACACAGGCTAGGAAATGTCTGTGCTACCGCAATGTCACTGAC 2160
QY 2218 CTCGGATCTCTGAGGCTGAGTCAAGGCTTCAAAATCTATCACAGCTTACGCTGCCAG 2277
D 2161 CTCGGATCTCTGAGGCTGAGTCAAGGCTTCAAAATCTATCACAGCTTACGCTGCCAG 2220
QY 2278 GCATCATCATCCCCCAGAGGTGACAGGCTACAGGCGGGGTTTCCTCACAGCCTGTC 2337
D 2221 GCATCATCATCCCCCAGAGGTGACAGGCTACAGGCGGGGTTTCCTCACAGCCTGTC 2280
QY 2338 AGCTTGTGATGCACTTATGGGCTGACAAAGATATGACTCTGGATGGAATCACTCC 2397
D 2281 AGCTTGTGATGCACTTATGGGCTGACAAAGATATGACTCTGGATGGAATCACTCC 2340
QY 2398 CCAGCTGAACTTTCCACCTGGAGTCTTGGGAATACCGAGCTGATCTCTTTATAGG 2457
D 2341 CCAGCTGAACTTTCCACCTGGAGTCTTGGGAATACCGAGCTGATCTCTTTATAGG 2400
QY 2458 TCATATGATGTGACCCAGTCTGCACTTCTGGGAGATCAACACCACTCCGCGTCAGGTGC 2517
D 2401 TCATATGATGTGACCCAGTCTGCACTTCTGGGAGATCAACACCACTCCGCGTCAGGTGC 2460
QY 2518 AGTCCACAGAAACTGTCCCTGGAAGTTGCTGCTGCCAGGAACGTGCTCAGATGGGACC 2577
D 2461 AGTCCACAGAAACTGTCCCTGGAAGTTGCTGCTGCCAGGAACGTGCTCAGATGGGACC 2520
QY 2578 TGTGATGGCTGCAACTTCCACTTCTGTGGAGAGCGCGCTGCTTCCGCTCTGCTCA 2637
D 2521 TGTGATGGCTGCAACTTCCACTTCTGTGGAGAGCGCGCTGCTTCCGCTCTGCTCA 2580
QY 2638 GTGGCTGACTTACCATGCTATGCTGCTGCTGCTGGGATCCAGAGACTACTTAC 2697
D 2581 GTGGCTGACTTACCATGCTATGCTGCTGCTGGGATCCAGAGACTACTTAC 2640
QY 2698 GTGTGGGAGAACCCAGCTATGCTGTGGGCAATTTCTGCTGCTGAGCAGAGTCAACC 2757
D 2641 GTGTGGGAGAACCCAGCTATGCTGTGGGCAATTTCTGCTGCTGAGCAGAGTCAACC 2700
QY 2758 ATCTGCAAAACCATAGATTTCTGGCTGAAAGTGGGCACTCTCTGAGGCACTGTACTGCC 2817

D 2701 ATCTGCAAAACCATAGATTTCTGGCTGAAAGTGGGCACTCTCTGAGGCACTGTACTGCC 2760
QY 2818 ATCTGCTCACCGCTTGGACCTGCTACTTTTGGAAAAGAAATCAAAAACCTAGAGTACAG 2877
D 2761 ATCTGCTCACCGCTTGGACCTGCTACTTTTGGAAAAGAAATCAAAAACCTAGAGTACAG 2820
QY 2878 TACTCCAAAGCTGTGATGAATGCTACTCTCAAGGACTGTGACCTGCCAGGCTGACAGC 2937
D 2821 TACTCCAAAGCTGTGATGAATGCTACTCTCAAGGACTGTGACCTGCCAGGCTGACAGC 2880
QY 2938 TGCCTCATCATGGAAGCGAGGATGTAGAGGACGACCTCATCTTTACCAGCAAGAA-TCA 2996
D 2881 TGCCTCATCATGGAAGCGAGGATGTAGAGGACGACCTCATCTTTACCAGCAAGAA-TCA 2940
QY 2997 CTCTTTGGGAAGATCAAAATCATTTTACCCTCCAGAGGACTCTCTGATGGATTTGACTCAGT 3056
D 2941 CTCTTTGGGAAGATCAAAATCATTTTACCCTCCAGAGGACTCTCTGATGGATTTGACTCAGT 3000
QY 3057 CCGCTGGAAGACATCTCTAGGAGGCCGACACATGGACCTGTGAGAGGCACTGCCTGCCTCA 3116
D 3001 CCGCTGGAAGACATCTCTAGGAGGCCGACACATGGACCTGTGAGAGGCACTGCCTGCCTCA 3060
QY 3117 CCGCTCCTCCTCACCTTGCATAGCAGCTTTGCAAGCTTCCGGGATTTGGGTGCCAGATC 3176
D 3061 CCGCTCCTCCTCACCTTGCATAGCAGCTTTGCAAGCTTCCGGGATTTGGGTGCCAGATC 3120
QY 3177 CTGCAACACCCACTGCTGGAATCTCTTCATTTGCTGCTTATCATGATGTTGAATTCAG 3236
D 3121 CTGCAACACCCACTGCTGGAATCTCTTCATTTGCTGCTTATCATGATGTTGAATTCAG 3180
QY 3237 ATCTTTTTTATAGAGTACCCAAACCTCTCTTCTGCTTGCCTCAAACTGCCTCAATATA 3296
D 3181 ATCTTTTTTATAGAGTACCCAAACCTCTCTTCTGCTTGCCTCAAACTGCCTCAATATA 3240
QY 3297 CCCACACTTTGTTTGTAAATTTAAAAA 3334
D 3241 CCCACACTTTGTTTGTAAATTTAAAAA 3278

RESULT-2
AAB26179
ID AAB26179 standard; Protein; 1013 AA.

XX	AC	AAB26179;	301	SNKGETSCHQCDPKYSEKSSCNVRPACTDKDYFHTACDANGETOLMYKWKAPKIC	360
XX	AC	AAB26179;	301	SNKGETSCHQCDPKYSEKSSCNVRPACTDKDYFHTACDANGETOLMYKWKAPKIC	360
XX	DT	12-FEB-2001 (first entry)	361	SELEGAVKLPASGVKTHCPNCPGPFKTNNSCTCQPCPYGYSNGSDCTRCPCAPTEPAVG	420
XX	DE	Human CASB619 protein #1.	361	SELEGAVKLPASGVKTHCPNCPGPFKTNNSCTCQPCPYGYSNGSDCTRCPCAPTEPAVG	420
XX	KW	Human; CASB619; cancer; autoimmune disease; immunogen; vaccine; epitope.	421	FEYKWNNTLPTNMTETVLGSGINFYKGMTGWEVAGDHIIYTAAGASDNDFMILVVPGR	480
XX	OS	Homo sapiens.	421	FEYKWNNTLPTNMTETVLGSGINFYKGMTGWEVAGDHIIYTAAGASDNDFMILVVPGR	480
XX	PN	WO200058460-A2.	481	PPQSVADTENKEVARITFVFETLCSVNCLEYFMVGVNSRTNTPVETWKGSKGQSYTYI	540
XX	PD	05-OCT-2000.	481	PPQSVADTENKEVARITFVFETLCSVNCLEYFMVGVNSRTNTPVETWKGSKGQSYTYI	540
XX	PF	20-MAR-2000; 2000WO-EP02478.	541	TEENTTSFTWAFQRTTFEASRKYTNVAKIYSINVTNVMNGVASYCRPCALEASDVGS	600
XX	PR	26-MAR-1999; 99GB-0007113.	541	TEENTTSFTWAFQRTTFEASRKYTNVAKIYSINVTNVMNGVASYCRPCALEASDVGS	600
XX	PR	25-SEP-1999; 99GB-0022858.	601	SCTSCPAGYYIDRDSGTCHSCPPNTILKAHOPYGVQACVPCGPGTKNNKIHSCLYNDCTF	660
XX	PA	(SMIK) SMITHKLINE BEECHAM BIOLOGICALS.	601	SCTSCPAGYYIDRDSGTCHSCPPNTILKAHOPYGVQACVPCGPGTKNNKIHSCLYNDCTF	660
XX	PI	Bruck CEM, Cassart J, Coche T, Vinals De Bassols YC.	661	SRNTPTRTENYFNSALANTVTLAGGSPFTSKGLKYFHHFTLSLCGNOGRKMSVCTDNVT	720
XX	PI	WPI; 2000-664923/64.	661	SRNTPTRTENYFNSALANTVTLAGGSPFTSKGLKYFHHFTLSLCGNOGRKMSVCTDNVT	720
XX	DR	N-PSDB; AAA95442.	721	LRIPEGESGFSKSIYAVCOAVIIPPTVGYKAGVSSQPVSLADRLIGVTTDMTLDGITS	780
XX	XX	Novel CASB619 polypeptides useful for diagnosing, and as vaccines for prophylactic and therapeutic treatment of, cancers, particularly ovarian and colon carcinoma, and autoimmune diseases	721	LRIPEGESGFSKSIYAVCOAVIIPPTVGYKAGVSSQPVSLADRLIGVTTDMTLDGITS	780
XX	XX	Claim 4; Page 54-56; 68pp: English.	781	PAELFHLESIGIPDVIFFYRSNDVTQSCSGSRSTTIRVRCSPKTVPGSLLLPCTSDGT	840
XX	XX	The present sequence comprises the human CASB619 protein sequence. This protein is thought to be specifically or over-expressed in tumour cells, and so can be used as a target for antigen-specific immune responses which can cause destruction of the tumour cell. In addition, the protein and gene can be used in cancer diagnosis, in the treatment of autoimmune diseases and in vaccines against cancer and autoimmune disease. The invention provides a number of epitopes derived from the protein which can be used as immunogens.	781	PAELFHLESIGIPDVIFFYRSNDVTQSCSGSRSTTIRVRCSPKTVPGSLLLPCTSDGT	840
XX	XX	Query Match 97.6%; Score 5376; DB 21; Length 1013; Best Local Similarity 99.4%; Pred. No. 0; Matches 978; Conservative 1; Mismatches 5; Indels 0; Gaps 0;	841	CDGCNHFHLESIAACPLCSVADYHAIYSSCVAGIQKTTYVWREPCLCSGGISLPQRYT	900
XX	QY	1 MAEPGHSHLSARVGRTERIPRLWRLLLWAGTAFQVTOGTGPELHACKSEYHYETA	841	CDGCNHFHLESIAACPLCSVADYHAIYSSCVAGIQKTTYVWREPCLCSGGISLPQRYT	900
XX	DB	1 MAEPGHSHLSARVGRTERIPRLWRLLLWAGTAFQVTOGTGPELHACKSEYHYETA	901	ICKTIDFWLKVGISAGTCTAILLTCTYFWKKNQKLEYKSKLVNATLKCDDLPAADS	960
XX	QY	61 CDSTGSRNRVAVPHTPGLCTSLPDVKGTECSFCNAGEFLDMKDOCKPCAEGRYSIGT	901	ICKTIDFWLKVGISAGTCTAILLTCTYFWKKNQKLEYKSKLVNATLKCDDLPAADS	960
XX	DB	61 CDSTGSRNRVAVPHTPGLCTSLPDVKGTECSFCNAGEFLDMKDOCKPCAEGRYSIGT	961	CAIMEGEDVEDDLIFTSKKSIFGK	984
XX	QY	121 GIRFDEWDELPHGFASLSANMELDDSAESTGCTSSKWPVRGDIYAFNTDECTATLMA	961	CAIMEGEDVEDDLIFTSKKSIFGK	984
XX	DB	121 GIRFDEWDELPHGFASLSANMELDDSAESTGCTSSKWPVRGDIYAFNTDECTATLMA			
XX	QY	181 VNLKQSGTGNFEYYPDSSIIIEFFVQNDQCPNADDSRWMMKTEKGWFEHVELNRGN			
XX	DB	181 VNLKQSGTGNFEYYPDSSIIIEFFVQNDQCPNADDSRWMMKTEKGWFEHVELNRGN			
XX	QY	241 VLYWRTAFSVMTKVPKPLVRNIATGVAYTSECPCPGTADQGSFCKLCPANSY			
XX	DB	241 VLYWRTAFSVMTKVPKPLVRNIATGVAYTSECPCPGTADQGSFCKLCPANSY			

Query Match 97.6%; Score 5376; DB 21; Length 1013;
Best Local Similarity 99.4%; Pred. No. 0;
Matches 978; Conservative 1; Mismatches 5; Indels 0; Gaps 0;

QY	1	MAEPGHSHLSARVGRTERIPRLWRLLLWAGTAFQVTOGTGPELHACKSEYHYETA	60
DB	1	MAEPGHSHLSARVGRTERIPRLWRLLLWAGTAFQVTOGTGPELHACKSEYHYETA	60
QY	61	CDSTGSRNRVAVPHTPGLCTSLPDVKGTECSFCNAGEFLDMKDOCKPCAEGRYSIGT	120
DB	61	CDSTGSRNRVAVPHTPGLCTSLPDVKGTECSFCNAGEFLDMKDOCKPCAEGRYSIGT	120
QY	121	GIRFDEWDELPHGFASLSANMELDDSAESTGCTSSKWPVRGDIYAFNTDECTATLMA	180
DB	121	GIRFDEWDELPHGFASLSANMELDDSAESTGCTSSKWPVRGDIYAFNTDECTATLMA	180
QY	181	VNLKQSGTGNFEYYPDSSIIIEFFVQNDQCPNADDSRWMMKTEKGWFEHVELNRGN	240
DB	181	VNLKQSGTGNFEYYPDSSIIIEFFVQNDQCPNADDSRWMMKTEKGWFEHVELNRGN	240
QY	241	VLYWRTAFSVMTKVPKPLVRNIATGVAYTSECPCPGTADQGSFCKLCPANSY	300
DB	241	VLYWRTAFSVMTKVPKPLVRNIATGVAYTSECPCPGTADQGSFCKLCPANSY	300

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

Sequence 19, Appl
Sequence 19, Appl
Sequence 22, App
Sequence 176, App
Sequence 5333, Ap
Sequence 5038, Ap
Sequence 174, App
Sequence 15, Appl
Sequence 27, Appl
Sequence 32, Appl
Sequence 29, Appl
Sequence 30, Appl
Sequence 1, Appl
Sequence 2, Appl
Sequence 6, Appl
Sequence 7, Appl
Sequence 2, Appl
Sequence 4, Appl
Sequence 48, Appl
Sequence 4, Appl
Sequence 13, Appl
Sequence 13, Appl
Sequence 1, Appl
Sequence 1, Appl
Sequence 1, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 211, App
Sequence 4760, Ap
Sequence 36, Appl
Sequence 3, Appl
Sequence 2, Appl
Sequence 23, Appl
Sequence 24, Appl
Sequence 26, Appl
Sequence 2, Appl
Sequence 50, Appl
Sequence 2, Appl
Sequence 2, Appl
Sequence 13, Appl
Sequence 375, App
Sequence 375, App
Sequence 375, App
Sequence 13, Appl

1001	6	0.6	282	1	US-08-318-947A-19
1002	6	0.6	282	2	US-08-795-033-19
1003	6	0.6	282	4	US-09-071-035-222
1004	6	0.6	286	4	US-09-071-035-176
1005	6	0.6	293	4	US-09-134-001C-5333
1006	6	0.6	305	4	US-09-134-001C-5038
1007	6	0.6	305	4	US-09-071-035-174
1008	6	0.6	314	4	US-09-215-252-15
1009	6	0.6	317	1	US-08-118-270-27
1010	6	0.6	317	5	PCT-US93-08528-27
1011	6	0.6	318	4	US-09-068-051A-32
1012	6	0.6	324	2	US-08-793-410-29
1013	6	0.6	324	2	US-08-793-410-30
1014	6	0.6	327	1	US-07-867-105B-1
1015	6	0.6	327	1	US-08-651-818A-2
1016	6	0.6	328	2	US-08-793-410-6
1017	6	0.6	328	2	US-08-793-410-7
1018	6	0.6	328	4	US-09-184-826-2
1019	6	0.6	328	4	US-09-080-205-4
1020	6	0.6	333	2	US-08-853-659A-48
1021	6	0.6	341	1	US-08-356-180-4
1022	6	0.6	349	4	US-09-006-353A-13
1023	6	0.6	349	4	US-09-573-966-13
1024	6	0.6	350	4	US-09-157-603-1
1025	6	0.6	350	4	US-09-587-436-1
1026	6	0.6	350	4	US-08-927-165A-1
1027	6	0.6	352	4	US-09-576-160B-1
1028	6	0.6	352	4	US-09-576-160B-2
1029	6	0.6	353	1	US-08-229-418-2
1030	6	0.6	353	2	US-08-932-761A-2
1031	6	0.6	353	4	US-09-307-912-2
1032	6	0.6	353	5	PCT-US95-0464A-2
1033	6	0.6	354	4	US-09-068-569-2
1034	6	0.6	359	4	US-09-288-143-211
1035	6	0.6	359	4	US-09-134-001C-4760
1036	6	0.6	361	1	US-08-415-751-36
1037	6	0.6	365	1	US-08-979-424-3
1038	6	0.6	365	4	US-08-928-383B-2
1039	6	0.6	365	4	US-08-928-383B-23
1040	6	0.6	365	4	US-08-928-383B-24
1041	6	0.6	365	4	US-08-928-383B-26
1042	6	0.6	365	4	US-09-272-496-2
1043	6	0.6	366	1	US-08-554-612C-50
1044	6	0.6	369	1	US-08-416-756A-2
1045	6	0.6	369	4	US-08-880-865-2
1046	6	0.6	376	4	US-09-213-232-13
1047	6	0.6	384	2	US-08-637-759B-375
1048	6	0.6	384	3	US-08-871-355A-375
1049	6	0.6	384	4	US-09-201-945-375
1050	6	0.6	389	2	US-08-605-106-13

ALIGNMENTS

RESULT 1
US-08-190-029A-10
; Sequence 10, Application US/08190029A
; Patent No. 5736363
; GENERAL INFORMATION:
; APPLICANT: EDWARDS, Richard Mark
; APPLICANT: BANDEN, Lindsey
; TITLE OF INVENTION: IGF-II ANALOG
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ALLEGRETTI & WITCOFF
; STREET: 10 S. WACKER DRIVE, SUI
; CITY: CHICAGO
; STATE: ILLINOIS
; COUNTRY: U.S.A.

50506
FILE FORM:
PRIORITY disk
APPL. APP.
F-

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08-190-025A-10
Query Match          0.8%; Score 8; DB 1; Length 349;
Best Local Similarity 100.0%; Pred. No. 10;
Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY.	680	VTL	AGPS	687
	110	VTL	AGPS	117

RESULT 2
US-08-462-695-10
Sequence 10, Application US/08462695
Patent No. 5854025
GENERAL INFORMATION:
APPLICANT: EDWARDS, Richard Mark
APPLICANT: BAWDEN, Lindsey
TITLE OF INVENTION: IGF-II ANALOGUES
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: BANNER & ALLEGRETTI, LTD.
ATTORNEY: 1000 DRIVE SUITE 3000

ZIP: 60606
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/462,695
 FILING DATE: 5-JUN-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/190,029
 FILING DATE: 28-FEB-1994
 PRIOR APPLICATION DATA: PCT/GB92/01389
 FILING DATE: 27-JUL-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: GB 9202401.7

RESULT 1
 AAF28030
 ID AAF28030 standard; DNA; 3334 BP.
 XX
 AC AAF28030;
 XX
 DT 08-MAY-2001 (first entry)
 XX
 DE Human TR13 receptor coding sequence SEQ ID NO: 39.
 XX
 KW Human; tumour necrosis factor receptor; TR13; TR14; infection;
 KW cancer; autoimmune disease; allergy; inflammatory disease;
 KW graft rejection; apoptosis; cardiovascular disease; aneurysm; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200105834-A1.
 XX
 PD 25-JAN-2001.
 XX
 PF 14-JUL-2000; 2000WO-US19343.
 XX
 PR 16-JUL-1999; 99US-0144087.
 PR 18-AUG-1999; 99US-0149450.
 PR 20-AUG-1999; 99US-0149712.
 PR 10-SEP-1999; 99US-0153089.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Ruben SM, Ni J, Young PE;
 XX
 DR WPI; 2001-112682/12.

XX Nucleic acids encoding 2 human tumor necrosis factor receptor
PT polypeptides (TR13) and (TR14)), useful for the prevention, diagnosis
PT and treatment of, e.g. cancers, acquired immune deficiency syndrome and
PT hypohidrotic ectodermal dysplasia -

Claim 4: Page 394-398; 418pp; English.

xx The present invention provides the protein and coding sequences of the
cc human tumour necrosis factor receptors TR13 and TR14. These sequences are
cc useful in the diagnosis and treatment of many diseases, including cancer,
cc autoimmune diseases, cardiovascular disorders, allergies,
cc neurodegenerative diseases, graft rejection, inflammation, aneurysms and
cc infections.

XX
Sequence 3334 BP: 820 A; 952 C; 811 G; 751 T; 0 other;
S0

Query Match	Score 3334;	DB 22;	Length 3334;
Best Local Similarity	100.0%;		
Pred. No. 0;			
Matches 3334;	Conservative	0;	Mismatches
		0;	Indels
		0;	Gaps

QY	1	GCAGAGCAGCAGCGCAGCAGCCTGAGCCGCTACTGCTCCCTCCTCAGCAGCAACGCTATG	60
Db	1	GCAGAGCAGCAGCGCAGCAGCCTGAGCCGCTACTGCTCCCTCCTCAGCAGCAACGCTATG	60
QY	61	GCTGAGCCTGGCAGCAGCCACCATCTCTCCGCGAGAGTCAGGGGAGAACTGAGAGGCGC	120
Db	61	GCTGAGCCTGGCAGCAGCCACCATCTCTCCGCGAGAGTCAGGGGAGAACTGAGAGGCGC	120
QY	121	ATACCCCGGCTGTGGCGGCTGTGCTCTGGCTGGGACCGCCTTCCAGGTGACCCAGGGA	180
Db	121	ATACCCCGGCTGTGGCGGCTGTGCTCTGGCTGGGACCGCCTTCCAGGTGACCCAGGGA	180
QY	181	ACGGGACCGAGAGCTTCACGCGCTCAAGAGTCTGAGTACCACTATGAGTACACGGGCTGT	240
Db	181	ACGGGACCGAGAGCTTCACGCGCTCAAGAGTCTGAGTACCACTATGAGTACACGGGCTGT	240
QY	241	GACAGCACGGGTTCAGGTGGAGGTCGCGCTCCGCATACCCGGGCGCTGCACCAAGC	300
Db	241	GACAGCACGGGTTCAGGTGGAGGTCGCGCTCCGCATACCCGGGCGCTGCACCAAGC	300
QY	301	CTGCTTGACCCCGTCAAGGACACGAGTGTCTTCTCTCAACGCGCGGGAGTTTCTG	360
Db	301	CTGCTTGACCCCGTCAAGGACACGAGTGTCTTCTCTCAACGCGCGGGAGTTTCTG	360
QY	361	GATATGAAGACCACTCATATGAACCATCGCTGAGGGCGCGCTACTCCCTCGGGCAGAGC	420
Db	361	GATATGAAGACCACTCATATGAACCATCGCTGAGGGCGCGCTACTCCCTCGGGCAGAGC	420
QY	421	ATTTCGGTTTATGATGATGGGATGAGCTGCCCATGCGCTTGGCCAGCCTCTCAGCCAAATG	480
Db	421	ATTTCGGTTTATGATGATGGGATGAGCTGCCCATGCGCTTGGCCAGCCTCTCAGCCAAATG	480
QY	481	GAGCTGATGACAGTGTGCTGAGTCCACCGGGAACCTGACTCTGCTCCAAAGTGGGTTCCC	540
Db	481	GAGCTGATGACAGTGTGCTGAGTCCACCGGGAACCTGACTCTGCTCCAAAGTGGGTTCCC	540
QY	541	CGGGCGCACTACATCGCCTTCAACACGGACGAATGCACAGCCACACTGATGACGCCGTC	600
Db	541	CGGGCGCACTACATCGCCTTCAACACGGACGAATGCACAGCCACACTGATGACGCCGTC	600
QY	601	AACCTGAAGCAATCTGGCAGCCGTTAACTTCGAATACTACTATCCAGACTCCAGCATCATC	660
Db	601	AACCTGAAGCAATCTGGCAGCCGTTAACTTCGAATACTACTATCCAGACTCCAGCATCATC	660
QY	661	TTTGTAGTTTTCGTTTCAGAATGACCAGTGCAGGCCAAATGACATGACTCCAGSTGGATG	720
Db	661	TTTGTAGTTTTCGTTTCAGAATGACCAGTGCAGGCCAAATGACATGACTCCAGSTGGATG	720
QY	721	AAGACCACAGAGAAAGGATGGGAATTCACAGTGTGGAGCTAAATTCGAGGCATAATGTC	780
Db	721	AAGACCACAGAGAAAGGATGGGAATTCACAGTGTGGAGCTAAATTCGAGGCATAATGTC	780

09
121

Db 1861 TGCACCTCTGTCTGCTGTTACTATATGACCGAGATTTCAGGAACCTGCACTCTCTGC 1920
QY 1921 CCCCTTAACACAATCTGGAAGCCCAACAGCCTTATGGTGCCAGGCTGTGTGCCCTGT 1980
Db 1921 CCCCTTAACACAATCTGGAAGCCCAACAGCCTTATGGTGCCAGGCTGTGTGCCCTGT 1980
QY 1981 GGTCCAGGACCAAGAACCAAGATCCACTCTCTGTGCTACAAATGATGACACCTTCTCA 2040
Db 1981 GGTCCAGGACCAAGAACCAAGATCCACTCTCTGTGCTACAAATGATGACACCTTCTCA 2040
QY 2041 CGCAACTTCCAAACAGGCTTCAACTTCAACTTCAACTTCAACTTCAACTTCAACTTCA 2100
Db 2041 CGCAACTTCCAAACAGGCTTCAACTTCAACTTCAACTTCAACTTCAACTTCAACTTCA 2100
QY 2101 CTCTCTGAGGGCCCAAGCTTCACTTCCAAAGGGTGAATTAATCTTCACTTACCCCTC 2160
Db 2101 CTCTCTGAGGGCCCAAGCTTCACTTCCAAAGGGTGAATTAATCTTCACTTACCCCTC 2160
QY 2161 AGTCTCTGTGGAACCAAGGGTAGGAATATGCTGTGTGCAACGACAATGTCACTGACCTC 2220
Db 2161 AGTCTCTGTGGAACCAAGGGTAGGAATATGCTGTGTGCAACGACAATGTCACTGACCTC 2220
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Db 2221 CGGATTCCTGAGGGTGAGTCAAGGGTCTCCAAATCTATCAAGCCTACGCTGCGCAGCA 2280
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Db 2281 GTCAATATCCCCCAGAGGTGACAGGCTACAGGCGGGGTTTCTTCAAGCCTGTGCTGAGC 2340
QY 2341 CTCTGATGACGACTTATGGGGTGACACAGATATGACTCTGGATGGAATCACTTCCCTCA 2400
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Db 2401 GCTGAACCTTTCCACCTGGAGTCTTGGGAATACCGGACGTGATCTCTTTTATAGGTCC 2460
QY 2461 AATGATGTGACCCAGTCTGAGTCTGAGGATCAACCCACCATCCCGCTCAGGTGCACT 2520
Db 2461 AATGATGTGACCCAGTCTGAGTCTGAGGATCAACCCACCATCCCGCTCAGGTGCACT 2520
QY 2521 CCACAGAAACTGTCCCTGGAAGTTGCTGCTGCGAGGAAGTGTCTGAGATGGGACCTGT 2580
Db 2521 CCACAGAAACTGTCCCTGGAAGTTGCTGCTGCGAGGAAGTGTCTGAGATGGGACCTGT 2580
QY 2581 GATGGCTGCAACTTCCACTTCTGCTGGAAGTGGGCTGCTGCGGCTGCTGCTGCTGCTG 2640
Db 2581 GATGGCTGCAACTTCCACTTCTGCTGGAAGTGGGCTGCTGCGGCTGCTGCTGCTGCTG 2640
QY 2641 GCTGACTACCATGCTATGCTGAGCAGCTGTGTGGCTGGATCCAGAACTACTTACGTG 2700
Db 2641 GCTGACTACCATGCTATGCTGAGCAGCTGTGTGGCTGGATCCAGAACTACTTACGTG 2700
QY 2701 TGGGAGAACCAAGCTATGCTGCTGGTGGCAATTTCTGCTGAGCAGAGTCAACCATC 2760
Db 2701 TGGGAGAACCAAGCTATGCTGCTGGTGGCAATTTCTGCTGAGCAGAGTCAACCATC 2760
QY 2761 TGCAAAACCATAGATTTCTGGCTGAAAGTGGGCATCTCTGCAAGGACCTGTACTGCCATC 2820
Db 2761 TGCAAAACCATAGATTTCTGGCTGAAAGTGGGCATCTCTGCAAGGACCTGTACTGCCATC 2820
QY 2821 CTGCTCACCGCTTGTACCTGCTACTTTTGGAAAAAGAAATCAAAACTAGAGTACAAGTAC 2880
Db 2821 CTGCTCACCGCTTGTACCTGCTACTTTTGGAAAAAGAAATCAAAACTAGAGTACAAGTAC 2880
QY 2881 TCCAAGCTGGTGATGAATGCTACTCTCAAGGACTGTGACCTGCCAGCAGCTGACAGCTGC 2940
Db 2881 TCCAAGCTGGTGATGAATGCTACTCTCAAGGACTGTGACCTGCCAGCAGCTGACAGCTGC 2940
QY 2941 GCCATCATGGAAGGCGAGGATGTAGAGGACGACCTTCATCTTTACCAGCAAGAAATCACTCT 3000

Db 2941 GCCATCATGGAAGGCGAGGATGTAGAGGACGACCTCATCTTTTACCAGCAAGAAATCACTCT 3000
QY 3001 TTGGGAAGATCAAAATCATTTACCTCCAAAGAGGACTCTCTGATGATTTGACTCAGTGCCGC 3060
Db 3001 TTGGGAAGATCAAAATCATTTACCTCCAAAGAGGACTCTCTGATGATTTGACTCAGTGCCGC 3060
QY 3061 TGAAGACATCTCTCAGGAGGCCCAAGACATGGACCTGTGAGAGGCACTGCTTGCCTCAGCTG 3120
Db 3061 TGAAGACATCTCTCAGGAGGCCCAAGACATGGACCTGTGAGAGGCACTGCTTGCCTCAGCTG 3120
QY 3121 CCTCCTCACCTTGCATAGCAACCTTTTGAAGCCTGCGGCGATTTGGGTGCCAGCATCTCTGC 3180
Db 3121 CCTCCTCACCTTGCATAGCAACCTTTTGAAGCCTGCGGCGATTTGGGTGCCAGCATCTCTGC 3180
QY 3181 AACACCCACTGCTGGAAATCTCTTCAATTTGGCCTTATCAGATGTTTGAATTTTCAGATCT 3240
Db 3181 AACACCCACTGCTGGAAATCTCTTCAATTTGGCCTTATCAGATGTTTGAATTTTCAGATCT 3240
QY 3241 TTTTATATAGAGTACCCAAACCCCTTCTGCTTGTGCTCAAAACCTGCCAAATATACCCA 3300
Db 3241 TTTTATATAGAGTACCCAAACCCCTTCTGCTTGTGCTCAAAACCTGCCAAATATACCCA 3300
QY 3301 CACTTTGTTGTAAATTTAAAAAATTTAAAAAATTTAAAAAATTTAAAAAATTTAAAAA 3334
Db 3301 CACTTTGTTGTAAATTTAAAAAATTTAAAAAATTTAAAAAATTTAAAAAATTTAAAAA 3334

AAB35333
ID AAB35333 standard; Protein; 1001 AA.
XX AC AAB35333;
XX DT 08-MAY-2001 (first entry)
XX DE Human TR13 receptor protein SEQ ID NO: 40.
XX KW Human; tumour necrosis factor receptor; TR13; TR14; infection;
XX KW cancer; autoimmune disease; allergy; inflammatory disease;
XX KW graft rejection; apoptosis; cardiovascular disease; aneurysm.
XX OS Homo sapiens.
XX PN WO200105834-A1.
XX PD 25-JAN-2001.
XX PF 14-JUL-2000; 2000WO-US19343.
XX PR 16-JUL-1999; 99US-0144087.
XX PR 18-AUG-1999; 99US-0149450.
XX PR 20-AUG-1999; 99US-0149712.
XX PR 10-SEP-1999; 99US-0153089.
XX PA (HUMA-) HUMAN GENOME SCI INC.
XX PI Ruben SM, Ni J, Young PE;
XX DR WPI; 2001-112682/12.
XX PT Nucleic acids encoding 2 human tumor necrosis factor receptor
PT polypeptides (TR13) and (TR14), useful for the prevention, diagnosis
PT and treatment of, e.g. cancers, acquired immune deficiency syndrome and
PT hypohidrotic ectodermal dysplasia -
XX PS Claim 40; Page 398-401; 418pp; English.
XX SS The present invention provides the protein and coding sequences of the
CC human tumour necrosis factor receptors TR13 and TR14. These sequences are
CC useful in the diagnosis and treatment of many diseases, including cancer,
CC autoimmune diseases, cardiovascular disorders, allergies,
CC neurodegenerative diseases, graft rejection, inflammation, aneurysms and
CC infections.
XX SQ Sequence 1001 AA;
Query Match 100.0%; Score 1001; DB 22; Length: 1001;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1001; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAEPGHSHLSARVRGTERRIPLWLLWAGTAFQVOTGTGPELHACKESVHYEYTA 60
Db 1 MAEPGHSHLSARVRGTERRIPLWLLWAGTAFQVOTGTGPELHACKESVHYEYTA 60
Qy 61 CDSTGSRWRVAVPHTPGLCTSLDPVKGTECSFSCNAGEFLDMKDQCKPCAGRYSIGT 120
Db 61 CDSTGSRWRVAVPHTPGLCTSLDPVKGTECSFSCNAGEFLDMKDQCKPCAGRYSIGT 120
Qy 121 GIRPDEWDELPHGFASLSANMELDDSAESTGCTSSKXWPRGDIYAFNTECTATLMA 180
Db 121 GIRPDEWDELPHGFASLSANMELDDSAESTGCTSSKXWPRGDIYAFNTECTATLMA 180
Qy 181 VNLKQSGTVNFEYYPDSIIPEFFVQNDQOPNADDSRWKTKTEKGWFEHVSVELNRGN 240
Db 181 VNLKQSGTVNFEYYPDSIIPEFFVQNDQOPNADDSRWKTKTEKGWFEHVSVELNRGN 240
Qy 241 VLYWRTAFSWTKVPKVLVNIATLGVAYTSECFPCPKGYADKQSSFCFCLCPANSY 300
Db 241 VLYWRTAFSWTKVPKVLVNIATLGVAYTSECFPCPKGYADKQSSFCFCLCPANSY 300
301 SNKGETSCHOCDDPKYSEKSSSCNVRPACTDKDYFYTHTACDANGETOLMYKWKPKIC 360
Db 301 SNKGETSCHOCDDPKYSEKSSSCNVRPACTDKDYFYTHTACDANGETOLMYKWKPKIC 360

Qy 361 SEDLEGAVKLPASGVKTHCPNPGFKTNNSCQCPYGSYNGSDCTRCRPAETPAVG 420
Db 361 SEDLEGAVKLPASGVKTHCPNPGFKTNNSCQCPYGSYNGSDCTRCRPAETPAVG 420
Qy 421 FEYKWNLTPTNMTTTLVSGINFEYKGMTGWEVAGDHIVTAAGASNDNFILTLVWVGP 480
Db 421 FEYKWNLTPTNMTTTLVSGINFEYKGMTGWEVAGDHIVTAAGASNDNFILTLVWVGP 480
Qy 481 PPOSVMADTENKEVARITTFVETLCSVNCELYFVWGVNSRNTPTVETWKSQKQSYTYI 540
Db 481 PPOSVMADTENKEVARITTFVETLCSVNCELYFVWGVNSRNTPTVETWKSQKQSYTYI 540
Qy 541 IEENTTSFTWAFORTTFHEASRKYTNDAKIYSINTVNWGVASVYCRPCALASDVGS 600
Db 541 IEENTTSFTWAFORTTFHEASRKYTNDAKIYSINTVNWGVASVYCRPCALASDVGS 600
Qy 601 SCTSCPAGYIIDRDSGTCHSCPNTILKAHQPYGVQACVPCGPGTKNKHSLCYNCTP 660
Db 601 SCTSCPAGYIIDRDSGTCHSCPNTILKAHQPYGVQACVPCGPGTKNKHSLCYNCTP 660
Qy 661 SRNTPRTFNYPFSAANTVTLAGGSPFTSKGLKYFHHFTLSLCGNQGRKMSVCTDNVT 720
Db 661 SRNTPRTFNYPFSAANTVTLAGGSPFTSKGLKYFHHFTLSLCGNQGRKMSVCTDNVT 720
Qy 721 LRIPESGSPKSIYAVCOAVIIPPEVTGYKAGVSSQPVSLADRLIGVTTDMTLDGITS 780
Db 721 LRIPESGSPKSIYAVCOAVIIPPEVTGYKAGVSSQPVSLADRLIGVTTDMTLDGITS 780
Qy 781 PAELFHLISLGIPDVIFPYRSNDVTQSCSGRSTIRVRCSPQKTVPGSLLLPCTCSGT 840
Db 781 PAELFHLISLGIPDVIFPYRSNDVTQSCSGRSTIRVRCSPQKTVPGSLLLPCTCSGT 840
Qy 841 CDGCFHFLWESAAACPLCSVADVHAIVSSCVAGTOKTYYVWRBPKLCSGGISLPEORVT 900
Db 841 CDGCFHFLWESAAACPLCSVADVHAIVSSCVAGTOKTYYVWRBPKLCSGGISLPEORVT 900
Qy 901 ICKTIDFWLVKVGISAGTCTAILLTCTCYFWKQKQKLEYKYSKLVMMATLXCDLPAADS 960
Db 901 ICKTIDFWLVKVGISAGTCTAILLTCTCYFWKQKQKLEYKYSKLVMMATLXCDLPAADS 960
Qy 961 CAIMEGEDVEDDLIFTSKNHSIGRSNHLPPRGLLMDLTQCR 1001
Db 961 CAIMEGEDVEDDLIFTSKNHSIGRSNHLPPRGLLMDLTQCR 1001